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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,391

02/17/2004

David Wiemer

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1628

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EXAMINER

KOSACK, JOSEPH R

ART UNIT

PAPER NUMBER

1626

MAIL DATE

DELIVERY MODE

08/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/780,391	<b>Applicant(s)</b> WIEMER ET AL.	
	<b>Examiner</b> Joseph Kosack	<b>Art Unit</b> 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

Claims 1-33 are pending in the instant application.

#### ***Amendments***

The amendment filed May 31, 2007 has been acknowledged and has been entered into the record.

#### ***Election/Restrictions***

Applicant's traversal of the scope of elected subject matter determined in the action mailed January 10, 2007 is noted. However, Applicant is reminded that the original election was treated ***without*** traverse as Applicant did not distinctly and specifically the supposed errors in the restriction requirement. Even though the traversal need be not be considered in the case of an election without traverse, the traverse has been considered and has not been found to be persuasive in that the genus claim lacks unity of invention under MPEP 803.02. The pyrophosphate group of R<sub>2</sub> is essential to the utility of the molecule because it determines what enzymes the isoprenoid analog can react with. Monophosphates, Diphosphates (pyrophosphates), and Triphosphates all react differently in the body and have different uses and potential energies. Additionally, the detectable group is essential to the utility in that the compounds are meant to be used additionally for accessing the metabolic status of an enzyme to measure the relative ratio of farnesylation to geranylation as depicted in original claim 36. Therefore, the determination of the scope of elected subject matter was made properly base on the restriction requirement of August 30, 2006.

#### ***Previous Claim Objections***

Claims 1-3 were previously objected to as containing non-elected subject matter. The non-elected subject matter has not been cancelled and the objection is maintained.

Claims 37 and 38 were previously objected to as being a substantial duplicate of claim 1. Those claims have been cancelled, and the objection is withdrawn.

Claims 2-33, 37, and 38 were previously objected to as being dependent off of a rejected/objected base claim. As the base claim is still objected or rejected, the objection is maintained for claims 2-33. Claims 37 and 38 have been cancelled, rendering the objection moot for those claims.

***Previous Claim Rejections - 35 USC § 112***

Claims 1-33, 37, and 38 were previously rejected under 35 U.S.C. 112, first paragraph for not being enabled for the prevention of diseases, and for not providing enabling guidance to make the compounds where X is oxygen or sulfur.

Applicant has traversed the rejection on the grounds that preventing diseases is no longer claimed and that "One of ordinary skill in the art is clearly directed, for example, to simply replace the amine reactant illustrated in the scheme with a corresponding oxygen or sulfur analog to provide a sulfur or oxygen analog of compound 56 or 60 as shown in Scheme 1."

The amendment to the claims to remove the preventing language is found to be persuasive towards that portion of the rejection. However, the Examiner maintains the rejection on not providing enabling guidance to make the compounds where X is oxygen or sulfur. The reaction schemes that are referenced in the Detailed Description are **not** generic in terms of the X group, rather they are always where X is an amine.

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Additionally, there are no species disclosed in where X is oxygen or sulfur. While working examples are not required, they can be extremely helpful to show enablement or written description. The level of skill in the art is high, however, chemical reactions are highly unpredictable when no guidance is presented to make the compounds. It is suggested that Applicant provide evidence within the art that the exact coupling of is predicable, either in the form of journal articles or a 37 CFR 1.132 declaration.

### ***Claim Objections***

Claims 1-3 are objected to as containing non-elected subject matter.

Claims 2-33 are objected to as being dependent off of a rejected/objected base claim.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-33 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification discloses a narrow synthetic scheme for the preparation of formula (I) wherein X is an amine but does not provide guidance to make the compounds of formula (I) where X is oxygen or sulfur. See Examples 1 and 2 in the specification.

***Conclusion***

Claims 1-33 are rejected. Claims 1-33 are objected to.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

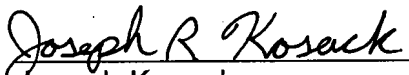
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Kosack whose telephone number is (571)-272-5575. The examiner can normally be reached on M-F 6:30 A.M. until 4:00 P.M. The examiner has every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph M<sup>c</sup>Kane can be reached on (571)-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joseph Kosack  
Patent Examiner  
Art Unit 1626

  
Rebecca Anderson, Primary Examiner  
for Joseph K. McKane  
Supervisory Patent Examiner  
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